



Center for Social & Economic Research

FINAL REPORT

**CASE ACTIVITIES WITHIN THE
*UKRAINIAN MACROECONOMIC POLICY PROGRAM***

DURING THE PERIOD OF JUNE 1, 1998 – NOVEMBER 30, 2001

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Table of Content:

1. BRIEF DESCRIPTION OF THE PROJECT -----	3
2. ACTIVITIES AND ACCOMPLISHMENTS-----	5
2.1. CURRENT MONITORING OF MACROECONOMIC DEVELOPMENTS -----	5
2.1.1. <i>Activities</i> -----	5
2.1.2. <i>Accomplishments</i> -----	6
2.2. MACROECONOMIC MODELING AND FORECASTING -----	10
2.2.1. <i>Activities on Macroeconomic Modeling</i> -----	10
2.2.2. <i>Accomplishments on Macroeconomic Modeling</i> -----	13
2.2.3. <i>Activities on Macroeconomic Forecasting</i> -----	14
2.2.4. <i>Accomplishments on Macroeconomic Forecasting</i> -----	15
2.3. INCREASING ACCURACY AND CONSISTENCY OF MACROECONOMIC FORECASTS PREPARED BY THE MOE AND MOF -----	15
2.3.1. <i>Activities on Transferring CASE Expertise in Macroeconomic Modeling, Forecasting, and Analysis</i> -----	15
2.3.2. <i>Accomplishments on Transferring CASE Expertise in Macroeconomic Modeling, Forecasting, and Analysis</i> -----	22
2.4. ASSISTANCE TO THE MOE AND MOF IN DEVELOPING INTERNAL CAPACITY TO PREPARE COMPREHENSIVE AND CONSISTENT POLICY ORIENTED ECONOMIC ANALYSES AND FORECASTS -----	23
2.4.1. <i>Activities on Transferring Analytical Know How</i> -----	23
2.4.2. <i>Accomplishments on Transferring Analytical Know How</i> -----	24
2.4.3. <i>Activities on the Assistance to the Market Development Department of the MOE</i> -----	24
2.4.4. <i>Accomplishments on the Assistance to the Market Development Department of the MOE</i> -----	26
2.4.5. <i>Activities on the Assistance to the Budget Department of the MOF</i> -----	27
2.4.6. <i>Accomplishments on the Assistance to the Budget Department of the MOF</i> -----	28
2.4.7. <i>Activities on the Completion of the HIID Project Analytical Works - Research</i> -----	28
2.4.8. <i>Accomplishments on the Completion of the HIID Project Analytical Works - Research</i> ---	29
2.5. LOCAL CAPACITY BUILDING -----	30
3. PROJECT ORGANIZATION-----	31
4. PUBLICATIONS -----	33
4.1. POLICY MEMORANDA-----	33
4.2. WORKING PAPERS -----	35
4.3. MONTHLY MEMORANDA -----	36
4.4. QUARTERLY ECONOMIC OUTLOOKS -----	38
4.5. ANALYTICAL REPORTS PREPARED FOR THE MDD -----	39
4.6. RESEARCH-----	39
4.7. MANUALS ON CASE FORECASTING INSTRUMENTS-----	40

1. Brief Description of the Project

The Center for Social and Economic Research (CASE) is a Warsaw-based NGO involved in policy oriented research, training and public education, policy advice and publication activities in Poland and in other transition economies. CASE has been engaged in policy advice and public education in Ukraine since 1993. At the beginning CASE was involved in the OSI funded project *Support for Economic Reforms in Countries of the Former USSR* (March 1993 – April 1994), and in the Soros International Economic Advisory Group (SIEAG) (September 1994 – March 1998). CASE started to work for the USAID in the framework of *Ukraine Macroeconomic Policy Program* carried out by the Harvard Institute of International Development (HIID) (August 1996 – February 1998). Between March 1997 and February 1998 CASE operated as the official HIID subcontractor. At the same time CASE was implementing the USAID funded project *Support for Economic Transition in Ukraine* (October 1997 – March 1999).

Effective June 1998, CASE became the USAID contractor under *Ukraine Macroeconomic Policy Program*, award No. 121-A-00-98-00623-00. The project was primarily assigned for the period June 1, 1998 – May 31, 1999. Later, it was extended through November 30, 2001 on the base of subsequent Modifications, which were both extending the time horizon for additional years and introducing changes into the terms of reference. The Final Report covers the description of activities performed, outputs produced, and accomplishments achieved over the lifetime of this award.

The purpose of *Ukraine Macroeconomic Policy Program* was to broadly support the economic reform effort of the Government of Ukraine (GOU), particularly the Ministry of Economy (MOE), Ministry of Finance (MOF), and National Bank of Ukraine (NBU), by providing advice and assistance on macroeconomic monitoring, modeling, forecasting, and analysis in order to improve policy design and implementation of macroeconomic policy reform. CASE assistance to Ukraine in developing ability to understand and analyze economic policy developments was carried out in the framework of the USAID Strategic Objective 1.2 focused on increasing soundness of fiscal policy and fiscal management.

CASE activities originally had two following objectives:

1. Monitoring of current macroeconomic developments and economic policy with special emphasis on:
 - monetary policy;
 - exchange rate policy;
 - financial markets developments.
2. Macroeconomic modeling and forecasting.

Above structure of the project had been valid until September 1, 2000 when the USAID introduced significant changes into the project description. Despite some stabilization in Ukraine achieved in previous years, the GOU still needed comprehensive program to deal with complex macroeconomic issues in transition. In particular, it was crucial to support the development of the GOU program by accurate and extensive macroeconomic forecasts. It was, therefore, important to provide the

MOE and MOF with tools, which would contribute to better understanding and accurate forecast of the impact of government policies on economic developments.

Thus, CASE responsibilities under the award were modified into the following:

1. Increasing accuracy and consistency of macroeconomic forecasts prepared by the MOE.
2. Transferring CASE expertise in macroeconomic modeling, forecasting, monitoring and analysis to the MOE, and as resources permit to the MOF.

In addition, a component of Research activities was incorporated. Research activities intended to serve the purpose of completing specific projects, which begun under the co-operative agreements funded by the USAID through S.O. 1.2 prior to September 1, 2000, carried out by the HIID.

Recognizing the government bodies' (particularly the MOE) need for comprehensive economic analyses the USAID decided to further amend the award objectives. Significant number of the MOE employees was still unfamiliar with modern monitoring and analytical tools necessary to provide policymakers with accurate assessment of economic performance and to propose appropriate strategies. Thus, there was a clear need for training the MOE representatives in economic monitoring and analytical skills through the transfer of modern techniques.

Consequently, effective January 1, 2001 the award objectives were reformulated in the following way:

1. Helping the MOE and MOF to develop internal capacity to prepare comprehensive and consistent policy oriented economic analyses and forecasts.
2. Transferring CASE expertise in economic forecasting, monitoring, and analysis to the MOE.

Furthermore, two additional components were incorporated into the project:

- Research activities in the field of comprehensive and consistent policy oriented analysis of major industries and markets for industrial products, energy sector and agriculture conducted in the cooperation with the Market Development Department of the MOE in January – November 2001;
- Research activities in the budget reform area conducted in the cooperation with the Budget Department of the MOF in March – April 2001.

Both amendments aimed at creating opportunities to continue or complete specific technical assistance tasks initiated under other USAID funded projects.

2. Activities and Accomplishments

2.1. Current Monitoring of Macroeconomic Developments

2.1.1. Activities

The program required from CASE to follow current macroeconomic developments and decision making process. CASE experts focused on major issues of macroeconomic policy in Ukraine with special emphasis on monetary policy, exchange rate policy, and financial markets development. In addition, attention was devoted to crucial aspects of fiscal policy, budget process, and tax system reform. Major important events in the Ukrainian economy and politics were determining the directions of our performance.

The most important events, which affected CASE activities, were: Ukrainian cooperation with the IMF on the EFF loan, Russian crisis and following Ukrainian crisis, liberalization of the currency exchange market, debate and approval of the Law on the National Bank of Ukraine, presidential election campaign and preparation of the post-election reform program, appointment of reform-oriented government in December 1999 and implementation of its program entitled 'Reforms for Prosperity', restructuring of external debt payments, debate on macroeconomic indicators for subsequent years budgets, debate on tax system reform. We were responding to the developments in macroeconomic situation advising the optimal solution to the Ukrainian policy makers. In order to assess current Ukrainian policies from wider perspective, global economy developments were always taken into consideration in the course of the project implementation. In particular, economic situation in major trading partner countries was of considerable interest.

The current monitoring was fulfilled through tracing all related issues on the daily basis and expressing experts' opinion on issues, which required pending reaction. CASE experts were pointing to the advantages and disadvantages of policy measures, commenting risks or negative results of some decisions, showing relevant experience of other transition countries, and presenting recommendations.

Monitoring activities included:

- **daily monitoring** of news services;
- **consultations** to the Ukrainian authorities on macroeconomic policy issues (including daily contacts and advisory assistance to the Ukrainian partners, co-operation between CASE and government experts, and meetings with the representatives of the Ukrainian authorities);
- co-operation with experts from the international financial organizations and other donor agencies;
- preparation of **policy memoranda** and policy recommendations on current macroeconomic issues (including realization of specific tasks on the Ukrainian authorities request);

- preparation of **working papers** analyzing more general macroeconomic policy topics;
- **seminars**.

2.1.2. Accomplishments

2.1.2.1. Current Consultations

CASE directed its advisory potential to closely cooperate with the Ukrainian officials in:

- **National Bank of Ukraine**, where we either advised or co-operated with:
 - Governor of the NBU
 - Chief of the Macroeconomic Advisory Group to the Governor of the NBU
 - Members of the Macroeconomic Advisory Group
 - Department of Currency Regulation
 - Department of Exchange Rate Policy
 - Department of Balance of Payments
 - Economic Department
 - Research Department
- **Prime Minister Office**, where we co-operated with the following partners:
 - Deputy Prime Minister in Charge of Economic Policy
 - Chief of the Prime Minister Secretariat
 - Government Secretary of the Cabinet of Ministers
 - Chief Advisor on Economic Policy to the Prime Minister
- **Ministry of Economy**, where the technical assistance involved the following partners:
 - Minister of Economy
 - Deputy Minister of Economy
 - Chief of the Department of Economic Strategy
 - Division of Macroeconomic Forecasting
- **Ministry of Finance**, where we advised:
 - Minister of Finance
 - Deputy Minister of Finance
 - Main Budget Department
 - Department of Fiscal Policy
 - Department of External Debt
 - Department of Tax Policy and Macroeconomic Prognoses
 - Division of Budget Policy and Macroeconomic Analyses
 - Council on Tax Policy in the Ministry of Finance
- **Presidential Administration**, where we advised the following partners:
 - Advisors to the President of Ukraine
 - Economic Policy Department of the Presidential Administration

- **Parliament**, where we maintained contacts with some Members of the Verhovna Rada

CASE consultants were in touch with the experts from other USAID funded projects (particularly, Ukraine Macroeconomic Policy Project carried out by the HIID and Ukraine Fiscal Policy Project carried out by the KPMG Barents), US Treasury Advisor in the Ministry of Economy, resident representatives and experts representing international financial organizations (IMF and World Bank), other donor agencies (like TACIS, UEPLAC) as well as experts representing foreign and local research institutes (such as ICPS, EERC, Institute for Economic Research and Policy Consulting in Ukraine-German Advisory Group on Economic Reforms, and Institute of Reforms).

This contact and co-operation network was critical for monitoring the key macroeconomic developments in Ukraine and active influencing the process of policymaking. In particular, personal contacts with the Ukrainian officials created an opportunity to influence, in the most effective way, everyday decision process, very often in the pre-implementation stage. Implemented or planned decisions, as well as the relevant CASE recommendations were the subject of discussion during numerous meetings. They were addressed both to the Ukrainian officials directly involved in the policymaking and foreign advisors in order to assure co-ordination of recommendations delivered to the Ukrainian government.

Advisory and consultation activities concentrated on commenting current macroeconomic situation, formulating recommendations on the particular policy issues, sharing the experience of other transition economies, and debating potential scenarios of economic developments in Ukraine and world-wide. As CASE experts gained policy experience in many transition countries, our analytical and technical assistance capacities allowed for assessing current Ukrainian policies and developments from a wider perspective. This kind of analysis was usually non-existent in most of the Ukrainian government institutions.

The emphasis of the award objective (i.e. monitoring current monetary and exchange rate policies and financial markets developments) determined main patterns of the advisory activities. From the beginning of the project we were mostly co-operating with the counterparts in the NBU.

The most frequently discussed topics included:

- influence of the Russian financial crisis on other CIS countries, in particular Ukraine;
- roots of the Ukrainian currency crisis in September 1998;
- after-crisis monetary policy;
- role of the central bank independence in macroeconomic stabilization;
- advantages and disadvantages of the new Law on the National Bank of Ukraine;
- foreign exchange rate policy;
- possibility of introduction of currency board regime in Ukraine;
- sequence in the foreign exchange market liberalization;
- analytical and forecasting work on monetary policy and inflation;

- sources of increasing/decreasing inflation;
- monitoring of broad money growth rate and its consequences for macroeconomic stability;
- methods of money supply control;
- effectiveness of various monetary policy instruments;
- analysis of negative economic consequences of postponing price liberalization of communal services;
- optimal pension reform program in short- and long-term perspective and the role of the NBU and monetary policy in supporting necessary changes;
- relationship between monetary and fiscal policy (monetary-fiscal policy mix) in the light of macroeconomic indicators for subsequent budgets.

Such factors like locating two members of the CASE advisory group in the NBU premises helped in stimulating demand from the NBU officials for CASE research, advises or recommendations practically on a daily basis. It allowed for our direct engagement and advisory impact on the current monetary and exchange rate policies. Everyday support in conducting monetary and exchange rate policy included commenting on current developments and policy decisions, taking part in strategic meetings of the NBU staff, and preparation of policy papers on the requested topics. We believe that our work helped the NBU staff in better understanding of:

- macroeconomic processes in general;
- macroeconomic policies undertaken in other transition economies;
- economic tendencies in the world.

During the award implementation the appointment of the reform-oriented government of the Prime Minister Victor Yushchenko took place in December 1999. As the CASE experts established earlier close cooperation with Mr. Victor Yushchenko as the Governor of the NBU, and the Chief of the Advisory Group to the Governor of the NBU, Mr. Victor Lysytskyi after their promotion to the positions of the Prime Minister and the Government Secretary of the Cabinet of Ministers, respectively, the priorities of CASE monitoring group also shifted. Consequently, CASE redirected significant part of its potential to cooperate with the new Prime Minister Office and concentrated on the issues and problems related to the main fields of new government's interests. At the same time less attention was paid to the current problems of monetary policy.

After appointment of Yushchenko's government our efforts were devoted to the preparation of coherent set of reform proposals. Later, CASE experts monitored their implementation, mainly the issues of external debt restructuring, cooperation with the IMF, the government program 'Reforms for Prosperity', macroeconomic forecasts and budgets for 2000, 2001 and 2002, sources of economic growth, evaluation and perspectives of economic growth, tax reform and other questions related to public finance reform.

Our policy recommendations were discussed during regular roundtable seminars organized on the request of the Prime Minister Office and initiated in mid April 2000. They involved the participation of the key civil servants of the Office of the Cabinet of Ministers, and CASE experts. For purpose of these roundtables, our

experts prepared several memoranda on specific issues suggested or requested by the Ukrainian counterparts, provided the overview and discussed current macroeconomic situation (see Section 4.1.). The agenda of meetings always reflected current needs of the Cabinet of Ministers. In addition, responding to the Prime Minister's request, we consulted on regular, monthly basis his Advisor on Economic Policy, Mr. Valerii Lytvychyi.

CASE consultants regularly cooperated with the Presidential Administration. We discussed the key questions of structural reforms related to such sectors and issues as energy, agriculture and the perspectives of privatization program in order to be able to better understand current developments and formulate the most likely future scenarios in these spheres for the sake of policy analysis as well as our modeling needs. In fact, all these issues were critical for the assessment of 2000 and 2001 budget execution, balance of payments developments, and, consequently, prospects of economic growth in medium and long term.

Besides policy advising, CASE was providing the Prime Minister Office, Presidential Administration, and NBU with the results of macroeconomic forecasts carried out under the project (see Section 2.2.). On the one hand, these contacts enabled Ukrainian officials the access to consistent, independent macroeconomic forecasts. As the side but very important effect, they also stimulated better information flow between various government agencies. On the other hand, these contacts contributed to our better understanding of various policy factors determining the macroeconomic developments and prospects of the Ukrainian economy. They were particularly helpful in the phase of formulating the exogenous assumptions (both external and domestic) for each subsequent quarterly or monthly forecast and in gathering the background information necessary for developing a forecasting model and interpretation of its results.

For the same reasons (i.e., collecting the necessary information, formulating model assumptions and interpreting model results), equally helpful were continued contacts with the representatives of the IMF and World Bank in charge of Ukraine.

Furthermore, responding to the specific requests from the Department of the Tax Policy and Macroeconomic Prognoses of the MOF, CASE experts analyzed the consequences of subsequent versions of the draft Tax Code and *ad hoc* changes in the tax system introduced by the parliament and government in 2000 and 2001, for the medium term budget revenues projection. One of the CASE representatives participated in the works conducted by the Experts-Consultants Council on Questions Related to the Reform of Ukrainian Tax Policy created in the MOF. We also prepared the comparative analysis of the tax reform carried out in other transition economies (basing on the existing CASE database), recommendations concerning a medium term budget planning, and the *Fiscal Strategy for 2002 - 2005*. Prepared reports were widely distributed among the MOF officials and acknowledged by its leadership (see Sections 4.1. and 4.2.).

Described current consultations also significantly contributed to the fulfillment of the second award objective related to macroeconomic modeling and forecasting (see Section 2.2.). They helped in:

- building the capacity for policy analysis for the sake of economic modeling;
- gathering specific economic information for the forecasting process;
- discussing assumptions for the subsequent forecasts;
- disseminating and discussing results of our forecasts with the key Ukrainian policymakers and other experts working on Ukrainian economy.

2.1.2.2. Policy Memoranda and Working Papers

Apart from verbal comments, CASE experts prepared and disseminated several policy memoranda and working papers. These publications covered both our responses to the concrete requests from our Ukrainian counterparts and more general macroeconomic policy issues (see Sections 4.1. and 4.2.).

2.1.2.3. Seminars and Conferences

CASE consultants organized or participated in several seminars devoted to current macroeconomic policy issues. They were addressed to the wide audience, including Ukrainian policy makers, parliamentarians, employees of the MOE, MOF and NBU, Ukrainian researchers, foreign advisors, and representatives of mass media. CASE brought the relevant experts conducting the lectures and workshops for the Ukrainian counterparts and facilitating exchange of practical experience.

Seminars covered, among other, the following topics:

- assessment of stabilization policy and appraisal of reforms carried out in Ukraine;
- package of the most urgent reform measures needed in Ukraine;
- influence of Russian crisis on other CIS economies;
- monetary policy and the banking sector;
- fiscal policy and public finance issues in the context of subsequent budgets preparation;
- macroeconomic forecast;
- assessment of the sources of economic growth in 2000 and perspectives for 2001.

In addition, CASE advisory and analytical activity was presented at the conference organized by the Freedom House in Kiev in 2000, entitled *Civil Leadership: The Role of Think Tanks in the Reform Process*. The general objective of this event was to convene a meeting of public policy institutions to discuss their role in Ukraine. The achievements of CASE in Ukraine operating as the USAID contractor were presented and discussed with the representatives of Ukrainian non-government organizations.

2.2. Macroeconomic Modeling and Forecasting

2.2.1. Activities on Macroeconomic Modeling

Successful implementation of the second award objective, that is macroeconomic modeling and forecasting, needed a comprehensive activity of CASE experts focusing on the development of the following modeling instruments:

- **medium-term quarterly model**, which was used in the analysis and forecast of major macroeconomic aggregates;
- **short-term monthly model**, which was used in the analysis and forecast of inflation, nominal GDP, and budget revenues;
- **foreign trade model**, which was used in the analysis and forecast of the Ukrainian balance of payments.

Our efforts concentrated on the continuous building, updating and improving the statistical databases, elaboration of the models' structure, constant updating, developing and extending the models, preparing subsequent forecasts, their interpretation, and presentations.

2.2.1.1. Medium Term Macroeconomic Model

Work on the quarterly model covered two aspects: building and updating the database, and elaborating model's structure. The following technical steps had to be undertaken in relation to this model during the project's implementation:

- Database covering major macroeconomic indicators was continuously built, modified and updated following the publication of official monthly and quarterly figures. The subsequent data was being regularly incorporated into the database. All the discrepancies and inconsistencies of the official statistics had to be eliminated by our own estimations. Database covered figures on: GDP and its components, value added, balance of payments, budget, monetary indicators, labor market, incomes, and prices. Database development resulted in the extension of the official data range to the second quarter of 2001 and the prognosis horizon to the end of 2002.
- Time series on some variables were being recalculated reflecting several changes in the official methodology, in order to guarantee their comparability with new figures (e.g. time series on households' consumption and income, reconsideration of real dynamics of GDP components and their deflators). Several official corrections in nominal GDP and its components for the subsequent years involved the corresponding changes in our database.
- Time series of all variables and deflators were regularly recalculated in constant prices after receiving corrected data for the respective base year.
- Forecasting techniques were improved by replacing in the model time series expressed in prices of base year with time series in prices of the previous year. Respective corrections were introduced into the database.
- Activities on constant developing the structure of the model covered creation and subsequent modifications or improvements of the following modules and links between them: Gross Domestic Product Block, Value Added Block, Balance of Payments Block, Consolidated Budget Block, and Monetary Block. These efforts

resulted in the model extension from less than 75 equations up to more than 100 equations of two types: regression, and identities.

- Regression equations were being regularly re-estimated along with successive extension of time series by new quarters, official corrections of nominal values of GDP and its components as well as of real annual dynamics of GDP across quarters.
- Attempts to estimate shadow economy were undertaken basing on the updated database.
- Forecast of the global economic conditions was incorporated into the quarterly model as the external assumptions. Analyses of world economic situation were being prepared in the CASE headquarter in Warsaw as the regular publication titled *Global Economy* for the purposes of supporting CASE modeling and forecasting activities in several countries of the region (see Section 4.4.).
- Techniques of linking forecast results obtained in econometric program E-views to Excel spreadsheets (and vice versa) were developed. We spent considerable amount of time elaborating user-oriented and convenient format for the database and forecast results presentation. Spreadsheets presenting forecast results were translated into Ukrainian. Our efforts aimed at establishing professional standards reflecting the Ukrainian authorities' needs and requirements.

2.2.1.2. Short Term Macroeconomic Model

CASE commenced works on the short-term model of inflation under the SIEAG grant. Under the reported USAID award CASE experts spent a lot of time for further developing the model's structure through the adjustments reflecting current dynamics of inflation and improvements with respect to the accuracy of forecasts. In order to keep this model updated the following activities were undertaken:

- Periodic representation of time series was changed from monthly into annual growth rates, which was more adequate for the periods of lower level of inflation.
- Time series were being regularly updated.
- Monthly time series on real and nominal GDP were being updated according to new official data, which created ground for further improvement of GDP deflator estimates.
- We got an access to more disaggregated price statistics. Although the lack of the sufficiently long data series did not allow incorporating them into the model, they were used as extra information explaining the deviation of price indices from the trend.
- Weights of particular groups of goods and services in the total consumer price index were estimated and incorporated into the model.

- Each month, all regressions were re-estimated along with the appearance of new observations related to price changes and new tendencies in the economy.
- Monthly forecast of inflation and nominal GDP was used to estimate budget revenues. In addition, monthly analysis of budget execution was conducted, which served for the revision of tax and non-tax revenues equations and the effective tax rates recalculation.
- On the base of monthly model of inflation and budget revenues there was developed monthly model of public debt of Ukraine, which was used for estimations presented in CASE publication titled *Public Debt of Ukraine and debt servicing possibilities in 1999-2000* (see Section 4.2.).

2.2.1.3. Foreign Trade Model

Apart from the above-mentioned efforts, CASE experts identified a need for the improvement of foreign trade component in the quarterly macroeconomic model. The issue resulted from the fact that the quarterly model required from users to set the main parameters related to foreign trade (first of all exports) as the exogenous variables. Since Ukraine was known as a highly export oriented economy, and therefore dependent on the external markets, the errors in the assumptions on foreign trade were to large extend influencing forecasts produced with the use of the quarterly model. Sequence of research studies resulted in the development of a set of PC-ready tools for foreign trade analysis and forecasts, which were complementary to the quarterly model. The survey on different analytical tools helped to choose the technique for data analysis based on OLAP (on line analysis and processing) – a modern technology, which enables to manage large databases. The econometric methods employed were those of standard time series econometrics. We also performed considerable works devoted to the search of reliable data sources and compilation of the databases.

The following tools facilitating analysis and forecast of foreign trade components were developed:

- Exports tool;
- Imports tool;
- Foreign Demand tool;
- External Debt of Ukraine tool;
- Balance of Payments tool.

The methods used while building mentioned tools followed the general theory of international trade and gravity model of international trade, which resulted in the most reliable forecasts of foreign trade in many countries. Forecasts of exports and imports prepared on the base of this model were used in the quarterly model in the balance of payments block as well as in the monthly model in the budget revenue block.

2.2.2. Accomplishments on Macroeconomic Modeling

CASE experts developed both short- and medium-term models up to the point, which allowed for:

1. Consistent macroeconomic forecasts of inflation, GDP, budgetary revenues, public sector borrowing requirements, and balance of payments items.
2. Simulation of the impact of different policies on macroeconomic developments (e.g. liberalization of the administered prices, cuts in the level of government consumption, monetary emission, changes in exchange rate, changes in interest rates, changes in tax rates, etc).
3. Incorporation and assessment of institutional and structural factors into the analysis of macroeconomic developments.

CASE macroeconomic models are not the finished and complete instruments in the sense that they do not cover all the sectors and aspects of the national economy. It is not possible to build such complete and closed models due to many obvious constraints present in a transition economy, particularly such as the Ukrainian one. One must mention the following problems facing constructors of such models: short and unstable data series, frequently changing statistical methodology, bad quality of statistical information, large informal sector, undergoing process of institutional and structural changes, exposure of the economy to various shocks, etc. During the project implementation at least two serious events caused important structural breaks to the observed macroeconomic trends and relations: financial crisis of the end of 1998, and beginnings of economic growth in 2000 and 2001.

In this situation the only feasible strategy of developing the forecasting models and keeping them as the useful policy tool was building subsequent blocks gradually, step by step, and continuous updating the existing statistical databases and re-estimating models' equations.

2.2.3. Activities on Macroeconomic Forecasting

The quarterly model was regularly used for preparing the following forecasts:

- medium-term GDP forecasts for the short-term model of inflation;
- forecasts of main macroeconomic indicators, presented and discussed extensively in the *Monthly Memoranda* and quarterly publication *Ukrainian Economic Outlook – Trends, Opinions, Prognoses* (see Sections 2.2.4., 4.3. and 4.4.);
- macroeconomic forecasts prepared for the MOE and MOF helping to check the consistency of their assumptions and forecasting procedures;
- macroeconomic forecasts prepared as the presentation materials for the purposes of training seminars (see Section 2.3.1.1.);
- series of forecasts prepared together with the MOE staff, which aimed at exercising the macroeconomic relationships in the economy (including individual consultations, see Section 2.3.1.2.);

- series of forecasts prepared on the specific request from the Ukrainian authorities (e.g. Prime Minister Office, NBU, MOE, and MOF) analyzing and presenting the Ukrainian economy developments under different circumstances;
- macroeconomic prognoses for the public forecasting seminars organized by the MOE, MOF, and NBU.

The short-term models were used as the instruments for preparing inflation, budget revenues, and foreign trade forecasts. In addition, their solutions were used as the inputs for work with the quarterly model. These forecasts were also carried out in close cooperation with the MOE and MOF staff as a part of the models' transferring process (see Section 2.3.1.).

2.2.4. Accomplishments on Macroeconomic Forecasting

During the project implementation a whole range of forecasts was prepared by CASE modeling group. These efforts included simulating different macroeconomic policy decisions. Our activities in this field had a significant education value.

We prepared, among other, several forecasts with various potential scenarios (usually baseline, optimistic, and pessimistic) of the macroeconomic developments taking into consideration the most important economic events: financial crisis in 1998, domestic and external obligations in the period of outflow of foreign capital, availability or lack of financing from the international organizations, preparation of subsequent draft budgets, budget revenue developments under different tax system changes, medium term effects of the Tax Code implementation, different paths of macroeconomic reforms. Results of some of these forecasts were extensively used in our consultation activities (see Section 2.1.2.1.) and the preparation of policy memoranda (see Section 4.1.).

Outcomes of the forecasting activities were regularly published in the *Monthly Memoranda* and quarterly *Ukrainian Economic Outlooks* (see Sections 4.3. and 4.4.). These publications were widely disseminated among the Ukrainian policy makers (including the Cabinet of Ministers, Presidential Administration, NBU, MOF, and MOE), researchers, foreign advisors, and mass media.

2.3. Increasing Accuracy and Consistency of Macroeconomic Forecasts Prepared by the MOE and MOF

2.3.1. Activities on Transferring CASE Expertise in Macroeconomic Modeling, Forecasting, and Analysis

As indicated in Section 1, starting from September 1, 2000 the project underwent serious changes in its agenda and organization. Key focus of the project was put on increasing accuracy and consistency of macroeconomic forecasts prepared by the MOE and MOF. In practice, meeting of this objective was realized through the

transfer of CASE expertise in macroeconomic modeling, forecasting, monitoring and analysis, which formally was formulated as the second project task.

Successful implementation of these tasks needed a complex of activities focusing on:

- Transferring the existing CASE forecasting instruments, technical know-how and skills connected with their operation to the relevant employees and organizational units of the MOE and MOF.
- Further developing and improving the forecasting instruments themselves taking into consideration their dynamic character, short and imperfect statistical data series available in Ukraine, frequent ex-post re-estimations of the official statistical data and ongoing serious structural and institutional changes in the Ukrainian economy. Further improving the analytical and presentation format of CASE forecasts and analyses being subject of the transfer to the MOE and MOF was taking place, too.
- Development of macroeconomic policy and macroeconomic analytical knowledge of the relevant employees of the MOE and MOF allowing them adequate formulating exogenous assumptions for the forecasting models, interpretation of the forecasting results, putting these results into the international context, carrying out the professional analyzes and projections on the basis of the CASE models, and following the pattern of CASE *Monthly Memoranda* and *Ukrainian Economic Outlooks*.

All these works were performed in close cooperation with the MOE and MOF representatives in order to improve radically their current capacity to produce consistent macroeconomic forecasts and analysis.

We performed transfer of the model, forecasting technology, skills, and analytical know-how to the Ukrainian counterparts through regular training of selected group of employees from the Division of Macroeconomic Forecasting of the MOE and the Division of Budget Policy and Macroeconomic Analyses of the MOF.

2.3.1.1. Seminars

The project staff, including its senior short-term consultants conducted several seminars and training meetings. Seminars and consultations carried out by senior consultants focused on the development of basic economic, econometric and statistical knowledge of the MOE and MOF staff and its understanding of the main trends and factors determining economic growth in the transition economies, particularly in the economy of Ukraine. This stage of educational/training activities was necessary in order to give the MOE and MOF specialists a proper understanding of the economic context and econometric/statistical limitations of the forecasting models and allow them an active using and development of these tools in future, after the project completion.

Therefore, these training activities concentrated on the basic principles of contemporary macroeconomics and macroeconomic policy in globalized economy,

methods of macroeconomic analyses, principles of econometrics, theoretical and practical foundations of the CASE models, their main components and assumptions, building and updating the statistical databases for the models purposes, and concrete forecasting techniques.

Seminars covered, among other, the following topics:

- System of national accounts;
- Construction and updating databases;
- Macroeconomic modeling methods;
- Building the macroeconomic models (in particular, model blocks with respect to our quarterly model: core aggregate demand block, the balance of payments block, the consolidated budget block, the financial requirement block, and the monetary block);
- Principles of links among particular models' blocks, including the role of exogenous parameters (special attention was paid to the interrelations between economy sectors (model blocks) and consequences of particular economic developments (model assumptions));
- Macroeconomic transmission mechanisms of changes introduced in the exogenous parameters;
- Directions and constrains of further models' development, including endogenization of inflation, budget expenditures programming, investment projection, private and government consumption evaluation, and exports estimation;
- Principles of medium term forecast in the conditions of transition economies, including theoretical methods, weaknesses and constraints;
- Join preparation of alternative internal and external forecast assumptions for years 2001 and 2002;
- Global economic outlook and alternative scenarios of developments in medium-term;
- Assessment of economic growth in Ukraine in 2000 and 2001;
- Main channels of the dependence of the Ukrainian economy on changes in global trends and external demand;
- Macroeconomic determinants of budget revenues and expenditures;
- Impact of various variants of tax reform and other changes in tax legislation on budget revenues, fiscal equilibrium and other macroeconomic variables;

- Inflation forecasting, impact of monetary and non-monetary factors (including the administrative price control);
- Exchange rate policy dilemmas in the current economic situation.

2.3.1.2. Technical Consultations and On-job Training

While our seminars focused on discussing some general issues of macroeconomics, macroeconomic policy, econometrics and statistics in the Ukrainian context, periods between them were devoted to additional training, explanations, and exercising specific issues discussed during seminars as well as to transferring practical knowledge connected with CASE models.

First of all, the on-job training concentrated on the components of **quarterly model**, which operational version was installed on the computers of both ministries' employees participating in the training. Complementary to this, analytical databases of variables being inputs to the model were also copied and compared with the data being in disposal of both ministries' staff. Various techniques of calculating real variables, deflators, and year over year changes were demonstrated and tried during the individual consultations.

Assistance in operating the databases, the E-views program, and the model itself was also provided to the ministries' staff. In addition, they received a full list of variables used in the model with their description. Furthermore, we provided trained specialists with several in-depth instruction concerning: procedures of re-estimation of the available time series, importing new data to the model, re-estimating econometric equations after inclusion of new information related to subsequent quarters, setting appropriate values for exogenous variables, solving the model equations, and adjusting results.

The on-job training took the form of individual consultations. CASE experts assisted the Ukrainian counterparts in exercising the following skills in modeling and forecasting:

- model installation;
- databases updating;
- estimation of lacking data;
- methods of statistical data importing/exporting between E-Views and Excel programs;
- managing links between working files of model;
- understanding model's algorithm, including identities, endogenous and exogenous variables, equations, and links between blocks;
- re-estimation of model equations after database updating or statistics revision;

- forecasting procedures and model solving;
- making forecast with different sets of assumptions, including macroeconomic simulations of baseline and alternative scenarios;
- methods of identifying weaknesses and inconsistencies in preliminary forecasts;
- methods of forecast results calibration and adjustment in order to achieve realistic and consistent outcomes;
- forecast analysis and interpretation.

In order to increase the efficiency of the on-job training we developed special educational program of workshops. The purpose of workshops was to provide the Ukrainian counterparts with the opportunity to practically test acquired knowledge under CASE consultants' supervision and assistance. To facilitate this arrangement we developed a set of exercises on making forecast, which were performed by the ministries' representatives.

Exercises consisted of several tasks (reflecting required skills in preparing forecast) and result matrixes (reflecting systematic presentation of forecast results). Assignments covered hypothetical mini-scenarios on economic developments. This method facilitated training on technical skills in modeling and forecasting as well as in macroeconomic simulations and results interpretation with respect to the following model components: GDP Block, VA Block, Budget Block, Monetary Block, and BoP Block. Training concentrated on the following issues:

- Introducing changes into the model assumptions, preparing forecast and indicating resulting changes of endogenous variables (aiming at familiarizing with specifics of exogenous variables with respect to each block);
- Goal seeking (aiming at achieving specified forecast by introducing proper changes into exogenous variables and showing the impact of different assumptions on the forecast results);
- Finding and correcting mistakes (aiming at eliminating errors purposely introduced into model and deepening understanding of model algorithms).

In addition to the training of the MOE and MOF staff with respect to particular blocks of the model CASE performed similar advanced training in all components of the quarterly model for selected MOE and MOF representatives. A total of three MOE and MOF employees were trained in complex model management.

In the final stage of training implementation our activities were extended to the designated representative of the Development Alternatives, Inc. (DAI) working under the *Support for Economic and Fiscal Reform* (SEFR) project. We provided the SEFR project employee with consultations related to construction, operation, management and application of CASE quarterly macroeconomic model. In particular, we transferred existing model software, databases, instructions, and model manual (see Section 2.3.1.3.).

At the same time, CASE experts conducted training on the forecasting instrument complementary to the quarterly model that is short-term **inflation model**. Transfer of the inflation model to delegated counterparts aimed at increasing the MOE and MOF capacities to predict the future values of several price indexes such as consumer price index (CPI), consumer price index of food products (CPIF), consumer price index of nonfood products (CPIN), consumer price index of services (CPIS), and producer price index (PPI).

Initial knowledge of our trainees in econometrics and programming skills in E-views determined the sequence of training activities. Taking into account both poor knowledge of econometrics and low level of computer skills of the ministries' staff, the process of model transferring started from studying the basic principles of econometrics and their application in practice, using econometric package E-views and program Excel.

The first several meetings were devoted to exercising main econometric concepts. In particular, we instructed the ministries' staff how to use the ordinary least square (OLS) procedure for catching the possible relationships between different factors. As a result, they became familiar with the idea about critical levels of p-values and standard errors, the meaning of R squared, Fisher statistic and Durbin-Watson statistic, the application of Akaike info and Schwarz criterion. At the same time, some basic skills in using E-views for these purposes were practiced.

The following training included activities concentrated on the transfer of technical skills in inflation model operation and practicing forecasting procedures by the MOE and MOF representatives under CASE assistance. These activities focused on:

- installation of inflation model and relevant database at the counterparts computers;
- detailed technical instructions on inflation components modeling and forecasting (including CPI, CPIF, CPIN, CPIS, and PPI);
- exercising inflation forecasting by introducing changes into exogenous variables: level of exchange rate, money supply, real output, and past inflation rate;
- macroeconomic simulations aiming at the analyses of different future inflation scenarios;
- comparison and identification of the advantages of different methods usually applied to the CPI forecast (including forecast based on the CPI regression that most properly describes the actual inflation data, and the CPI estimation as weighted average of three forecasted CPI components: CPI food, CPI nonfood and CPI services);
- elaboration of program that launched the model in E-views and automatically transported the obtained estimations into Excel file with user-oriented interface

where cumulative indexes were recalculated into monthly, quarterly and annual inflation rates.

In addition, CASE experts supervised the MOE and MOF representatives in elaborating their own inflation models, in order to strengthen their knowledge and skills with respect to inflation modeling. Trainees conducted the following works:

- creation of regressions in E-views (determination of endogenous and exogenous variables);
- determination of regressions form;
- interpretation of coefficients (i.e. their economic and statistical significance);
- determination of regressions fit with actual data;
- forecast of inflation rate;
- comparison of two inflation models: one provided by CASE and one elaborated by the trainees (including debate on advantages and disadvantages of both models, combining the best features of both models).

Furthermore, training on analytical and forecasting techniques with respect to the **foreign trade model** was conducted. Consultation meetings concerned wide range of topics varying from the general overview of international trade theory to the specifics of foreign trade modeling and forecasting. They aimed at increasing the MOE and MOF staff understanding of exports, imports, and implications of different policy measures for Ukrainian foreign trade. Training covered transferring specially developed tools on foreign trade analysis (see Section 2.2.1.3.). In particular, it included:

- installation of the tools at the counterparts computers;
- detail description of the tools;
- instructions on tools functioning, use, and applications;
- database management;
- methods of tools updating after a new information becomes available;
- instructions on the relationship between different tools;
- analyses of tools' shortcomings;
- methods of overcoming the weaknesses of econometric modeling and achieving reliable forecasts.

2.3.1.3. Training Materials

Lectures and on-job training were supplemented by written training materials handed to the staff of both ministries. We prepared several notes and memoranda, which helped in understanding the problems, which were subject of the training seminars. At the same time these materials served both as written comments to the models assumptions and interpretation of the results in order to help the MOE and MOF staff understanding the basic economic interrelations and problems, which must be taken into account in the process of macroeconomic forecasting and during preparing complex macroeconomic analyses.

Furthermore, we provided written in-depth instructions concerning: procedures of re-estimation of the available time series, importing new data to the model, re-estimating econometric equations after inclusion of new information related to subsequent quarters, setting appropriate values for exogenous variables, solving the model equations, and examining their results. CASE experts elaborated and transferred to the MOE, MOF, and DAI employees detailed written manuals (both hard copies and electronic versions) covering methodology and guidelines on CASE models and policy oriented modeling and forecasting techniques (see Section 4.7.).

2.3.2. Accomplishments on Transferring CASE Expertise in Macroeconomic Modeling, Forecasting, and Analysis

Effective assistance to the MOE and MOF in increasing accuracy and consistency of their macroeconomic forecasts needed in significant effort aimed at transferring CASE analytical and technical know-how related to macroeconomic modeling and forecasting. CASE provided the ministries' employees with three macroeconomic forecasting instruments:

- medium-term quarterly model applicable in the analysis and forecast of major macroeconomic aggregates;
- short-term monthly model facilitating the analysis and forecast of inflation, nominal GDP, and budget revenues;
- foreign trade model used in the analysis and forecast of the Ukrainian balance of payments.

Before starting cooperation within the framework of the reported award the MOE and MOF did not have any modern and professional analytical tools, which could help in analyzing trends in the Ukrainian economy, preparing consistent macroeconomic forecasts, and generating various scenarios of future macroeconomic developments. CASE undertook considerable attempts at building and developing the ministries' capacity to understand, run, and implement advanced econometric techniques related to macroeconomic policy.

In particular, intensive training in macroeconomic modeling and forecasting provided by our consultants enabled the ministries' staff to:

- build and update databases necessary to improve macroeconomic modeling and forecasting;

- prepare more consistent medium term macroeconomic forecasts;
- prepare more consistent monthly macroeconomic forecasts;
- simulate different macroeconomic policy scenarios;
- simulate and assess short and medium term impacts of macroeconomic policy decisions and measures;
- re-estimate CASE models without significant external assistance.

Equipped with modern technology and technical skills in economic monitoring, modeling and forecasting the MOE and MOF staff might do more accurate and comprehensive policy oriented macroeconomic forecasts and evaluate impact of economic policies. Our activities had a significant educational value, that is, they increased understanding of links between the macroeconomic processes. Furthermore, as an indirect effect they substantially increased the ministries' abilities to adequately maintain and properly interpret any econometric models similar to those developed by CASE.

We also succeeded in getting senior government officials to understanding that the results of various forecasts should be questioned and analyzed until they are intellectually defensible. In the past, there was little internal questioning of the figures generated by the forecasting departments. Our efforts had a positive feedback from the top government authorities that now understand the necessity of having a professional team able to secure consistent macroeconomic analyses and forecasts.

Involvement of the SEFR project's representative into our technical assistance related to the construction and operation of CASE models created the opportunity for continuation of our model usage and extension by the MOE and MOF staff beyond reported award completion.

2.4. Assistance to the MOE and MOF in Developing Internal Capacity to Prepare Comprehensive and Consistent Policy Oriented Economic Analyses and Forecasts

2.4.1. Activities on Transferring Analytical Know How

Apart from the engagement in the educational activities on modern forecasting technologies CASE experts assisted the MOE and MOF in developing their internal capacities to prepare comprehensive and consistent policy oriented economic analyses and forecasts. In spite of a significant improvement in the course of last few years, many official government documents still differed in their format from the standards typical in the market economies and had some remnants of the past. This related both to the ex-post economic analyses and presentation format of the forecasting/projection documents.

In its advisory work CASE always put a significant emphasis on transferring our analytical know-how related to macroeconomic policy analyses in transition economies. All activities aimed at developing the ministries' own analytical capacities by joint work with ministries' staff, discussing the relevant problems, and proposing optimal practical solutions.

2.4.2. Accomplishments on Transferring Analytical Know How

The achievements of our assistance in this sphere could be measured in concrete products. CASE and the MOE jointly initiated issuing of *Monthly Memoranda*, which presented the results of forecasting works (see Sections 2.2.4., 4.3. and 4.4.). In the course of the project implementation, gained experience allowed the MOE commencing the issuance of its independent monthly publication titled *Monitoring of Macroeconomic and Sectoral Indicators*.

Furthermore, CASE decided to use its own publication - the *Ukrainian Economic Outlook – Trends, Opinions, Prognoses* – as the recommended presentation format of the regular, quarterly macroeconomic analyzes and forecasts. As the *Ukrainian Economic Outlook* was a relatively new product (the first issue was presented in June 2000), it needed further development and improvement, in order to reach the desired presentation format. This target was already achieved in spring 2001 and subsequent issues could be used as training material on analytical and editorial skills.

In addition, CASE experts assisted the MOE staff in preparation of their other occasional policy documents (for example *Medium Term Projection*). The similar kind of assistance was provided to the MOF involving comments on the MOF analytical documents (for example, CASE experts' recommendation on the *Fiscal Strategy for 2002 – 2005*). We always attempted to advice on the analytical aspects as well as on the structure and form of prepared materials.

2.4.3. Activities on the Assistance to the Market Development Department of the MOE

Responding to the USAID and the MOE proposal the award was extended with the technical assistance task to the Market Development Department (MDD), which was responsible for the preparation of reports on development and optimal regulation of markets (in particular, industrial sector, fuel and energy complex, agricultural and infrastructure sectors). Effective October 2000, CASE took over expert group, which was engaged in providing the similar kind of assistance under the previous USAID funded HIID project. Professor Janusz Szyrmer supervised experts cooperating with the MDD.

The main objective of the expert group was capacity building in the MOE through improving the quality of analytical reports prepared by the MDD. The expert group directed its potential on teaching the MDD staff to carry out analysis of the real sector of the economy, to display most important trends in market development, and to forecast possible reaction of these markets to any significant changes in the

economic environment. Establishment of the MDD organizational and informational network that would enable such analysis was of equal importance.

The expert group in close cooperation with the MDD employees focused on conducting comprehensive and consistent policy oriented analysis of major industries and markets for industrial products. Research activities concentrated on the following aspects:

- Research on Ukraine's economic performance in 2000 and 2001 with special attention devoted to trends, structural changes, and financial conditions in particular sectors. The main purpose of the analysis was to identify factors, which had the most positive or negative impact on the Ukrainian economic development, as well as to assess the impact of these factors on each sector.
- Analysis on the financial state of the economy and industrial sectors. In particular, the following issues were taken into account: structure of payments (e.g. barter transactions and cash receipts), government administrative measures aimed at improving settlements, structure and nature of outstanding liabilities, and correlation between the scale of privatization in the sectors and indicators on liabilities. The MOE officials acknowledged the substance and format of this research (i.e. application of regressions and correlations, graphic presentation, tables, etc.).
- Development of the methodology for operative forecasting of the Ukrainian industry based on the business activity surveys of Ukrainian enterprises. Efforts included: collection of data series obtained from the surveys on business activity for the period from 1998 until the 3rd quarter 2001, collection of time series received from traditional statistics, comparison and retrieving functional dependence between sampling analysis and national statistics, elaboration of the methodology for operative forecasts, and promotion of format for quarterly analytical report to be produced either as an independent document or as a part of report on industrial development.
- Assistance on the adoption of a new classification system by economic activities, which was introduced in 2001 instead of classification system by economic sectors. Activities aimed at helping the MDD staff in the preparation of their quarterly analysis according to the new classification system. A number of meetings were held to resolve the issue of discrepancies between the statistics in two classifications, explain the methodological concepts behind, and propose appropriate responses. The expert group focused on developing the methodology for analysis of compliance between industrial statistics basing on sectors' codes and economic activity codes. It allowed for overcoming the problem of incomparability of statistics for this and previous years.
- Compilation of the database on industrial indicators. The database included a set of indicators starting from 1999 (some from 1997) and ending in October 2001. Database equipped with standard interactive Windows interface allowed for the following main functions:
 - copying statistical data from entry data file and converting it into time series;

- creating inquiries according to existing classification system (by sectors, by activities, by regions, by enterprises, and by products);
- data saving for further modification and inquiries;
- transferring selected series to Excel through OLE.

Database was installed on the computers of the MDD divisions.

- Compilation of the database on creditor and debtor liabilities basing on the financial data obtained from the State Statistics Committee in electronic format. The database was installed on the computers of the MDD divisions and monthly updated. In addition, the ministry staff was instructed and consulted on the use of the database.
- Development of common outline and format for the analytical notes prepared within the MDD. The expert group proposed outlines for memoranda on:
 - industry;
 - agriculture;
 - transport and communication.

Suggested outlines were distributed among the divisions, discussed during join meetings, commented by the divisions' staff, and approved. The outlines worked out the following aspects:

- format of the tables;
- samples of the graphs;
- references to the sources of information;
- analytical format, including pointing necessary emphasis;
- conclusions and recommendation.

Submitting of unified analytical notes in terms of their outlines from the divisions considerably simplified the process of consolidated report preparation.

- Development of the outline and framework for the financial analysis reports. The main sections of the reports were determined as follows:
 - arrears to GDP ratio;
 - outstanding creditor and debtor liabilities ratio by economic sectors;
 - outstanding liabilities by structure and dynamics.

The expert group performed described activities in close cooperation with the MDD specialists, with special attention being devoted to the MOE internal capacity building. A number of meetings were conducted with the leaders and members of the following divisions: Industrial Policy Division, Division for Infrastructure Market Development, Division for Fuel and Energy Complex Development, Division for Housing and Construction Policy, Division for Market Development and Sectoral Reforms. Daily cooperation always aimed at transferring experts' skills and knowledge to the MDD employees.

2.4.4. Accomplishments on the Assistance to the Market Development Department of the MOE

The main achievements of the expert group assisting the MDD were the following:

- Arrangement of the access to the State Statistics Committee data in the electronic form and their dissemination among the employees of the MDD divisions. This arrangement simplified and speeded up information flow among the divisions and processing process within the ministry. Development of databases significantly eased the use of statistics by the MOE staff and led to savings in time necessary for receiving and processing information. Unification of data sources, format, and structure among the divisions created background for consistent analysis performed by the divisions.
- Establishment of professional standards for analytical reports prepared by the MDD employees, including their implied outline and format. Unlike the traditional standard of similar documents produced by the MOE staff in the past, the expert group suggested to apply the regression analysis in order to justify hypothesis, illustrate materials with the help of graphs that simplifies perception of the text, and to base the analysis on calculated and normalized data instead of simply stating basic statistical figures. Over the last months the MDD specialists significantly improved the quality of their quarterly analyses and analytical materials. The leaders of the ministry expressed interest in the proposed format of the research, since such high-quality materials were not produced in the ministry in the past.
- Compilation of databases and development of methodology for operative forecasting of the Ukrainian industry indicators based on the business activity surveys of the Ukrainian enterprises.
- Preparation of several analytical reports in close cooperation with the MDD staff (see Section 4.5.). Publications were widely disseminated among all divisions of the MDD, Minister of Economy, Vice Prime Minister, Presidential Administration, and research institutes.
- Contribution to the reorganization of the MDD and modification in the employees' responsibilities in order to guarantee better department's functioning.

2.4.5. Activities on the Assistance to the Budget Department of the MOF

Responding to the USAID and the Budget Department of the MOF proposal the project was extended with the technical assistance task to this department. Effective March 1, 2001 CASE took over the expert group, which started implementing this task under the *Ukraine Fiscal Policy Project* carried out by the KPMG Barents and terminated on February 28, 2001.

The expert group conducted research activities in the budget reform area in March – May 2001. It was involved in providing technical assistance during transition process in the implementation of program-based budgeting system. The expert group

was transferring experience in the implementation of budget-related software packages for collecting and analyzing the budget data.

2.4.6. Accomplishments on the Assistance to the Budget Department of the MOF

The efforts resulted in the following accomplishments:

- Development of special application for creating and analyzing (through comparisons with the previous year sets) classification proposals.
- Assistance in the research and development of general structure of classifications (program, economic, agencies, etc).
- Analysis of existing software packages in order to develop the new software specifications and estimate the necessary changes in existing IT infrastructure.
- Research and development of the general structure and technical specifications of the software complexes for FY 2002 and beyond.
- Development of the preliminary analysis procedures for the works with program-classified budget data.

The works were conducted in close cooperation with the Budget Department of the MOF. The achievements allowed conducting the transitional process painlessly and helped to effectively use experience already collected in the field of providing IT services to the MOF.

2.4.7. Activities on the Completion of the HIID Project Analytical Works - Research

The purpose of this project component was to complete the selected research and analytical works conducted under the *Ukraine Macroeconomic Policy Project* conducted by the HIID. In the period of December 2000 – November 2001, the selected most important policy analysis papers were edited, updated, revised, extended, translated, etc, and prepared for the publication in the form of two books (both in English and Ukrainian edition), one monograph, and several journal articles and working papers. The group of the Ukrainian assistants led and supervised by Professor Janusz Szyrmer, former HIID project coordinator, performed research activities.

2.4.7.1. Books

- Janusz Szyrmer and David Snelbecker (eds), *Reforms for Ukraine: Ideas and Actions*. First Edition in English and Second Edition in Ukrainian, Kyiv: Harvard/CASE (Alterpress)

In this book, diverse concepts and ideas concerning post-Soviet transition were presented. The analysis and evaluation of current experience with transition were used to formulate policy recommendations for Ukraine and other countries of

the region. The focus of the book was on specific reform measures as well as interactions among these measures and their direct/indirect and short-term/long-term effects on the economy. The authors emphasized the importance of such disciplines as general social science theory, political economy, and sociology, as well as such growth factors as information, institutions, both formal and informal, and policies.

- Janusz Szyrmer (ed), *Ukraine: Monetizing a Transition Economy*. First Edition in English and Second Edition in Ukrainian, Kyiv: Harvard/CASE (Alterpress)

Many of the ideas and analyses presented in this book were elaborated over the past five years (1996-2000) and delivered in the form of various analytical and advisory notes to Ukrainian political leaders. The main theme of the book was “monetization” of the economy – involving issues like cash transactions, monetary policies, financial institutions, and development indicators – and the importance of monetization to a transition economy: the development of a competitive market, sustainable growth, and prosperity.

2.4.7.2. Monographs and Articles

- Vladimir Dubrovskyi, Janusz Szyrmer, Tamara Shigayeva, Oleksandr Bilotserkivets, Ruslan Bondarenko, and Mikola Golovanenko, *Effects of De-etatization on the Performance of Enterprises in the Context of the Macroeconomic Situation in Ukraine* (in Ukrainian). Kyiv: HIID/CED.

This monograph presented the results of research done within an HIID sub-project “Micro-foundations for macro-policies”, initiated in 1999. This research was done jointly with the experts from the Center of Economic Development (CED). It covered an econometric analysis of the performance of Ukrainian enterprises in 1998-2000, studied in the context of their privatization status and other variables.

- Vladimir Dubrovskyi and Janusz Szyrmer, *Investments and Growth in Ukraine: Econometrics against Stereotypes* (in Ukrainian). *Ekonomichny Reformy S'yohodni* 2001/35: 46-51.

2.4.8. Accomplishments on the Completion of the HIID Project Analytical Works - Research

The research group made significant efforts to disseminate the results of HIID/CASE work. A number of TV and radio programs were produced. Members of this group participated in seminars and conferences. Several articles were published in the newspapers. The former HIID Internet site was maintained; and the results of the HIID/CASE analytical works were regularly presented on this site. Thus, many of the thoughts expressed in the research group works contributed, directly or indirectly, to the Ukrainian policies and reforms.

2.5. Local capacity building

Building and strengthening the local capacity in the policy research, analytical and forecasting fields were the key objectives of the CASE activity in Ukraine in the whole decade of 1990s. This related not only to central government, which was the chief recipient of the technical assistance in the sphere of macroeconomic policy.

CASE realized relatively early that Ukraine lacked the research centers and institutes, which were prepared to deal with the problems of transition. Traditional Soviet research institutes (affiliated with universities, the Ukrainian National Academy of Science or to individual ministries) did not have the capacity to deal with the transition agenda and very often they were an impediment to the reform process. The newly created NGOs usually did not have sufficient professional capacity to make an impact on policy.

Hence, under the earlier project on *Support for Economic Transition in Ukraine* (October 1997 – March 1999; grants No. 181-A-00-97-00321 of the USAID Warsaw and No. 121-G-00-97-09004-00 of the USAID Kiev) CASE started to build its own daughter research institution – Center for Social and Economic Research CASE-Ukraine, which was finally registered by the Ministry of Justice of Ukraine in the end of June 1999.

Under the reported award, CASE-Ukraine was significantly strengthened becoming one of the key independent policy research and analytical centers in Ukraine. The new organization benefited in several ways both from the reported award and from the earlier terminated HIID project. First of all, CASE-Ukraine took over a significant part of the Ukrainian research and analytical staff working under both awards, including management of the new organization. CASE-Ukraine researchers gain both experience and concrete analytical and forecasting skills, which allow them to work in other projects on their own. CASE-Ukraine also continues some analytical/forecasting products initiated under the reported award, such as the monthly memoranda on key macroeconomic indicators, the quarterly Ukrainian Macroeconomic Outlook and previous HIID/CASE Web page. In consultation with the USAID Regional Mission in Kiev CASE-Ukraine also got project library and part of the project equipment.

In the course of award implementation, eight local consultants started their MA or PhD programs in the US and UK universities.

3. Project Organization

The internal organization of the project followed its subsequent modifications. At the beginning, the project implementation was coordinated by Professor Marek Dabrowski. However, when the focus of the project concentrated on the narrower task of transferring the macroeconomic model and forecasting know-how to the MOE staff the role of coordinator was taken over by Dr. Mirosław Gronicki. At the end of October 2000, when it became clear that the project agenda was amended with the additional project components Professor Marek Dabrowski came back to the function of the Project Coordinator with Dr. Mirosław Gronicki being in charge of transferring the model and forecasting know-how, and Professor Janusz Szyrmer being responsible for the research component and supervising the MDD expert group. Finally, Magdalena Tomczynska became responsible for supervising the expert group working for the Budget Department of the MOF.

Award implementation was interfered by changes and amendments to the project agenda. It especially intensified starting in September 2000. Consequently, this required a far going, subsequent reorganizations of the project activities. In addition, since summer 2000 the project implementation was affected by several organizational and administrative problems:

- Frequent changes in the project agenda introduced by the subsequent project modifications, reformulation of project's terms of reference, and adding the new project components making its merit structure more heterogeneous what seriously complicated the process of project management.
- CASE consultants had to deal with changing composition of the MOE staff group delegated to cooperation with the CASE modeling group. It was caused both by the rotation of the MOE staff and ongoing reorganization of this ministry. Only in the beginning of March 2001 the composition of this group stabilized and the person being in charge of the overall coordination of the project activities on the MOE side finally appointed.
- CASE suffered an increased rotation of its local consultants caused by: (1) the unclear perspectives of project continuation in summer 2000 (the project was initially scheduled to end in February 2001 and had to reduce the size of its staff); and (2) the high interest of staff members (supported by CASE) in continuing their economic education abroad.
- Notwithstanding several assurances that the Ministry of Economy expressed its willingness to accommodate CASE group in-house, the project was facing considerable difficulties with obtaining sufficient office space for its employees in the Ministry of Economy building due to office space constraints suffered by the MOE itself.
- From January 1, 2001 the entry rules to the Cabinet of Ministers/ Ministry of Economy/ Ministry of Finance building were seriously tightened, particularly for foreigners, additionally disorganizing the project work. Finally, in the beginning

of July 2001, our project (similarly to other foreign technical assistance projects) lost this limited office space in the MoE building, which was at its disposal from the summer of 2000.

The above mentioned organizational and administrative problems seriously affected the conditions of project implementation during the last year of CASE activities in Ukraine. For example, the continuous problems with office premises, several removals, lack of funds for renting additional office located out of the government building in September 1 – November 30, 2000, never ending disputes on the necessity to have such an office, etc. diverged a significant part of the project staff energy from project's merit tasks and destabilized the elementary organizational environment of our work.

4. Publications

4.1. Policy Memoranda

1. Pavel Kovalev, Alexander Rohozinsky and Alosha Shapovalov, *Analysis of the Draft of the New Budget*, July 9, 1998;
2. Mirosław Gronicki, Pavel Kovalev, Vadym Lepetyuk and Katarzyna Pietka, *Analysis of the Current Situation and Forecast on Macroeconomic and Budgetary Indicators of Ukraine*, July 27, 1998;
3. Mirosław Gronicki, Pavel Kovalev, Vadym Lepetyuk and Katarzyna Pietka, *Crisis in Ukraine: Potential Scenario of the Macroeconomic Situation in the Face of the Financial Crisis Development*, July 1998;
4. Mirosław Gronicki, Pavel Kovalev and Vadym Lepetyuk, *Analysis of Influence of the Hryvna Devaluation on the Other Macroeconomic Variables*, September 8, 1998;
5. Marek Dabrowski, Pavel Kovalev, Vadym Lepetyuk and Malgorzata Markiewicz, *Roots of Financial Crisis in Ukraine and Possible Methods of its Overcoming*, October 5, 1998;
6. Jerzy Osiatynski, *Notes on the 1999 Budget Expenditures of the Republic of Ukraine*, October 7, 1998;
7. Rafał Antczak and Malgorzata Markiewicz, *Reserve Requirements in Poland*, October 7, 1998;
8. Marek Dabrowski, *Why Independent Central Bank is Necessary and What This Independence Means*, October 24, 1998;
9. Malgorzata Markiewicz, *Interrelations Between Monetary and Fiscal Policy in Ukraine*, October 28, 1998;
10. Mateusz Szczurek, *Money Market Bills of the National Bank of Poland*, October 1998;
11. Marta Dekhtiarchuk, *Fiscal Policy and New Instruments of Budget Deficit Financing in Ukraine*, October 1998;
12. Marta Dekhtiarchuk, *Relationship Between Money Supply and Inflation*, November 10, 1998;

13. Marek Jarocinski, *Inflationary Consequences of the Russian Crisis of August 17th*, November 30, 1998;
14. Katarzyna Pietka, *Table of Sources and Uses*, November 1998;
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